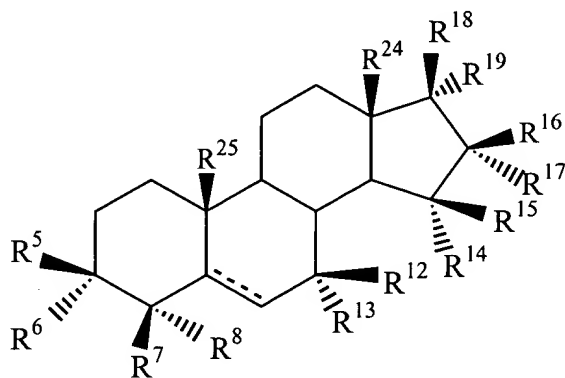


AMENDMENTS TO THE CLAIMS

This listing of claims replaces any prior version of the claims in the application.

5 Claims 1-32 (cancelled).

33 (withdrawn): A pharmaceutical composition comprising at least one compound of the following structure



10 wherein R⁵ and R⁶ are each independently selected from the group consisting of OC(O)OCH₃, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer, provided that at least one of R⁷ and R⁸ are OC(O)OCH₃;

15

20

 wherein R⁷, R⁸, R¹², R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸ and R¹⁹ are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether,

an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R^7 and R^8 together, R^{12} and R^{13} together, R^{14} and R^{15} together, R^{16} and R^{17} together, and R^{18} and R^{19} together independently form a double bond to a moiety selected from the group consisting of $=O$, $=S$, $=CH_2$ and $=NOH$, provided that only one each of R^{12} and R^{13} or R^{18} and R^{19} can independently be H;

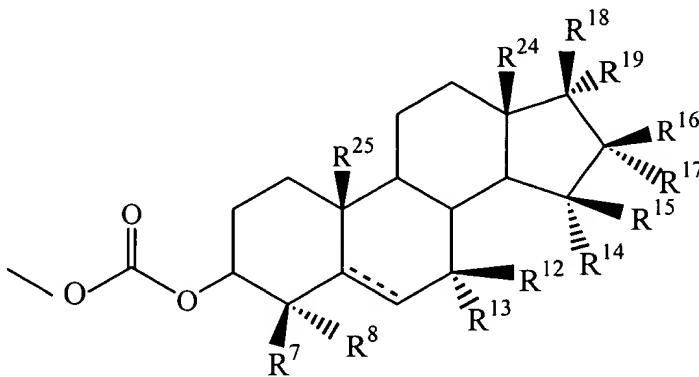
wherein R^{24} and R^{25} are either H or CH_3 ;

wherein the dotted line is an optional double bond;

wherein the $OC(O)OCH_3$ at the 3 position is in either the α or β configuration;

and a pharmaceutically acceptable excipient.

34 (withdrawn): The pharmaceutical composition of claim 33, wherein said at least one compound has the following structure



wherein R^7 , R^8 , R^{12} , R^{13} , R^{14} , R^{15} , R^{16} , R^{17} , R^{18} and R^{19} are each independently selected from the group consisting of $-H$, $-OH$, $-SH$, $-NH_2$, $-OSO_3H$, $-OPO_3H$, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally

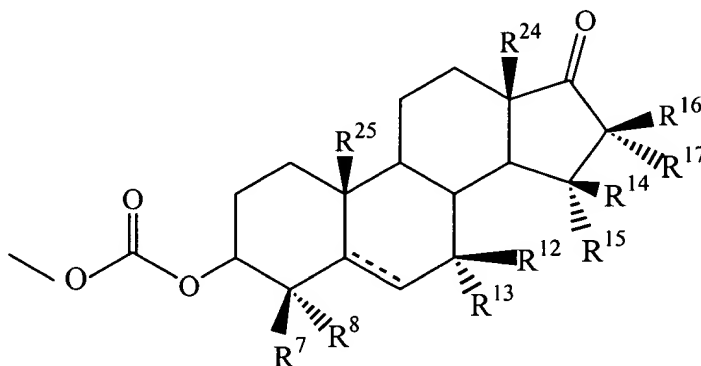
substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a
 5 nucleoside, a nucleotide, an oligonucleotide, a polymer and R^7 and R^8 together, R^{12} and R^{13} together, R^{14} and R^{15} together, R^{16} and R^{17} together, and R^{18} and R^{19} together independently form a double bond to a moiety selected from the group consisting of $=O$, $=S$, $=CH_2$ and $=NOH$, provided that only one each of R^{12} and R^{13} or R^{18} and R^{19} can independently be H;

10 wherein R^{24} and R^{25} are either H or CH_3 ;

wherein the dotted line is an optional double bond;

wherein the $OC(O)OCH_3$ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

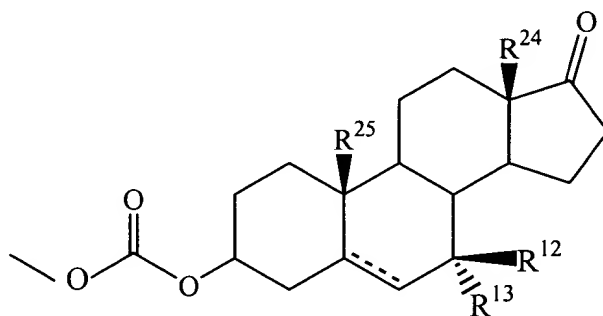
15 35 (withdrawn): The pharmaceutical composition of claim 34, wherein said at least one compound has the following structure



wherein R^7 , R^8 , R^{12} , R^{13} , R^{14} , R^{15} , R^{16} and R^{17} are each independently selected from the group consisting of -H, -OH, -SH, - NH_2 , - OSO_3H , - OPO_3H , an ester, a
 20 phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle,

an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R^7 and R^8 together, R^{12} and R^{13} together, R^{14} and R^{15} together, and R^{16} and R^{17} together independently form a double bond to a moiety selected from the group consisting of $=O$, $=S$, $=CH_2$ and $=NOH$, provided that only one of each of R^{12} and R^{13} can independently be H; wherein R^{24} and R^{25} are either H or CH_3 ; wherein the dotted line is an optional double bond; wherein the $OC(O)OCH_3$ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

36 (withdrawn): The pharmaceutical composition of claim 35, wherein said at least one compound has the following structure



wherein R^{12} and R^{13} are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R^{12} and R^{13} together form a double

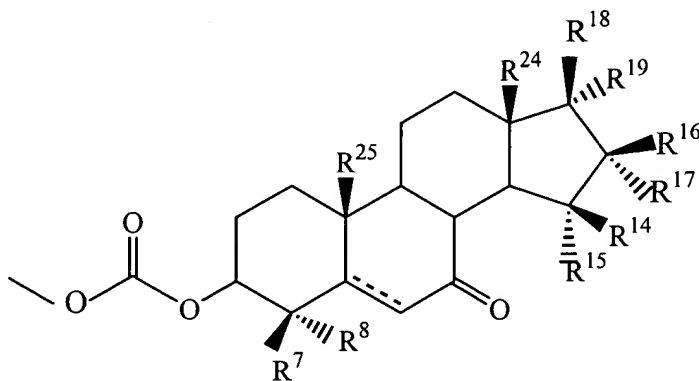
bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one of R¹² and R¹³ is H;

wherein R²⁴ and R²⁵ are either H or CH₃;

wherein the dotted line is an optional double bond;

- 5 wherein the OC(O)OCH₃ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

37 (withdrawn): The pharmaceutical composition of claim 34, wherein said at least one compound has the following structure



10 wherein R⁷, R⁸, R¹⁴, R¹⁵, R¹⁶, R¹⁷, R¹⁸ and R¹⁹ are each independently selected from the group consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl
15 group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a
20 nucleoside, a nucleotide, an oligonucleotide, a polymer and R⁷ and R⁸ together, R¹⁴ and R¹⁵ together, R¹⁶ and R¹⁷ together, and R¹⁸ and R¹⁹ together independently form a double bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one of each of R¹⁸ and R¹⁹ can be H;

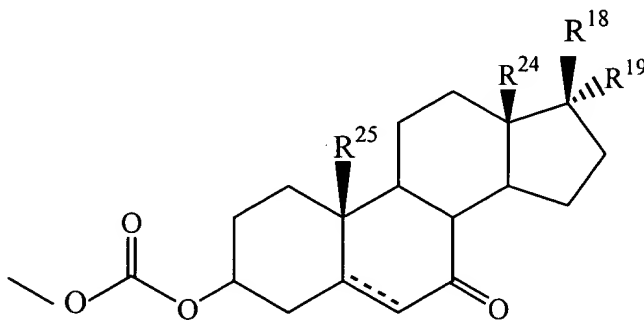
wherein R^{24} and R^{25} are either H or CH_3 ;

wherein the dotted line is an optional double bond;

wherein the $OC(O)OCH_3$ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

5

38 (withdrawn): The pharmaceutical composition of claim 37, wherein said at least one compound has the following structure



wherein R^{18} and R^{19} are each independently selected from the group

consisting of -H, -OH, -SH, -NH₂, -OSO₃H, -OPO₃H, an ester, a phosphoester, a phosphonoester, a sulfite ester, a sulfate ester, a thioester, an amide, a sulfonamide, an amino acid, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, an optionally substituted aryl moiety, an optionally substituted heterocycle, an optionally substituted heteroaryl moiety, an optionally substituted monosaccharide, an optionally substituted oligosaccharide, a nucleoside, a nucleotide, an oligonucleotide, a polymer and R^{18} and R^{19} together form a double bond to a moiety selected from the group consisting of =O, =S, =CH₂ and =NOH, provided that only one of R^{18} and R^{19} is -H;

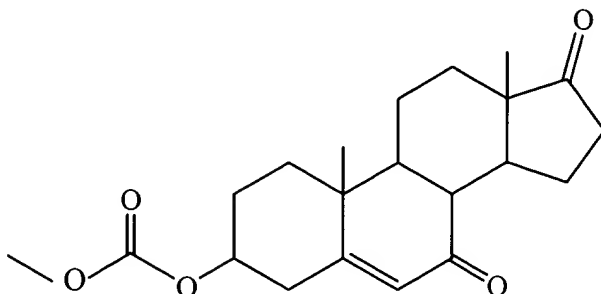
wherein R^{24} and R^{25} are either H or CH_3 ;

wherein the dotted line is an optional double bond;

wherein the -OC(O)OCH₃ at the 3 position is in either the α or β configuration; and a pharmaceutically acceptable excipient.

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39 (withdrawn): The pharmaceutical composition of claim 34, wherein said at least one compound has the following structure

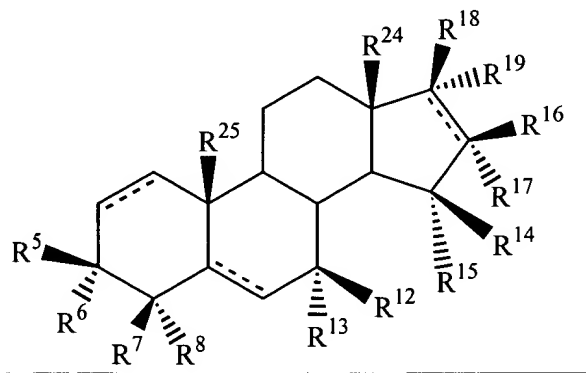


and a pharmaceutically acceptable excipient.

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Claims 40-55 (cancelled).

Claim 56. (new): A method to treat an androgen responsive disease in a subject, or to ameliorate one or more symptoms, comprising administering to the subject, or delivering to the subject's tissues an effective amount of a formulation comprising one or more excipients and a compound having the structure



wherein,

R⁵ and R⁶ independently are -H, -OR^{PR}, -SR^{PR}, -N(R^{PR})₂, an ester, -NH-
15 C(O)-C1-50 organic moiety, an amino acid, a peptide, an ether, a thioether, a carbonate, a carbamate, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, a monosaccharide, an oligosaccharide or a polymer, provided that at least one of R⁵ and R⁶ is a carbonate;

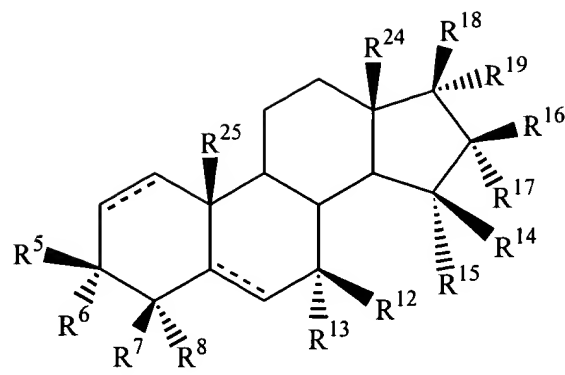
R^7 , R^8 , R^{12} , R^{13} , R^{14} , R^{15} , R^{16} and R^{17} together or each independently are -H, $-OR^{PR}$, $-SR^{PR}$, $-N(R^{PR})_2$, $-OSO_3H$, $-OPO_3H$, $=O$, $=S$, $=CH_2$, $=NOH$, an ester, an amide, an amino acid, a peptide, an ether, a thioether, an acyl group, a carbonate, a carbamate, a sulfonamide, a halogen, an optionally substituted alkyl group, an optionally substituted alkenyl group or an optionally substituted alkynyl group; and

R^{18} and R^{19} together or each independently are -H, $-OR^{PR}$, $-SR^{PR}$, $-N(R^{PR})_2$, $=O$, $=S$, $=CH_2$, $=NOH$, an ester, $-NH-C(O)-C1-50$ organic moiety, an amino acid, a peptide, an ether, a thioether, a carbonate, a carbamate, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted alkynyl group, a monosaccharide, an oligosaccharide or a polymer, provided R^{18} or R^{19} is $-OR^{PR}$, $-SR^{PR}$, $-N(R^{PR})_2$, $=O$, $=S$, $=NOH$, an ester, $-NH-C(O)-C1-50$ organic moiety, an amino acid, a peptide, an ether, a thioether, a carbonate, a carbamate, a monosaccharide, an oligosaccharide or a polymer; and

R^{24} and R^{25} independently are -H, ester, ether or optionally substituted alkyl.

Claim 57. (new): The method of claim 56, wherein the androgen responsive disease is selected from the group consisting of prostate cancer, benign prostatic hyperplasia, breast cancer, alopecia, acne, hypogonadism and hirsutism.

Claim 58. (new): The method of claim 57 wherein the compound has the structure



Claim 59. (new): The method of claim 58 wherein

- (a) R¹⁸ is -OH, -O-C(O)-CH₃, -O-C(O)-CH₂CH₃, and R¹⁹ is -H, -C≡CH or -C≡CCH₃, or R¹⁸ and R¹⁹ together are =O, =S or =NOH, or
 5 (b) R¹⁸ is -H, -C≡CH or -C≡CCH₃ and R¹⁹ is -OH, -O-C(O)-CH₃, -O-C(O)-CH₂CH₃.

Claim 60. (new): The method of claim 59 wherein R⁷ and R⁸ independently
 10 or together are -H, -OH, -SH, -NH₂, =CH₂, =CHCH₃, =NOH, =NOC(O)CH₃, =O or =S.

Claim 61. (new): The method of claim 60 wherein R¹² and R¹³
 independently or together are -H, -OH, -SH, -NH₂, =CH₂, =CHCH₃, =NOH,
 15 =NOC(O)CH₃, =O or =S.

Claim 62. (new): The method of claim 61 wherein R¹⁴ and R¹⁵
 independently or together are -H, -OH, -SH, =O or =S and R¹² is -H and R¹³ is -H,
 -OH or -SH.

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Claim 63. (new): The method of claim 62 wherein R¹⁶ and R¹⁷
 independently or together are -H, -OH, -SH, =O, =S, -O-C(O)-CH₃ or -O-C(O)-OCH₃.

Claim 64. (new): The method of claim 63 wherein R^5 and R^6 independently or together are -H, -OH, -SH, =O, =S, -O-C(O)-CH₃ or -O-C(O)-OCH₃.

5 Claim 65. (new): The method of claim 64 wherein R^{24} is -CH₃, -CH₂OH, -CH₂OC(O)CH₃, -OC(O)CH₃ or -CH₂OC(O)OCH₃ and R^{25} is -H, -CH₃, -CH₂OH, -CH₂OC(O)CH₃, -OC(O)CH₃ or -CH₂OC(O)OCH₃.

Claim 66. (new): The method of claim 65 wherein R^7 , R^8 , R^{14} , R^{15} and R^{17} are -H, R^{16} is -H or -OH.

10

Claim 67. (new): The method of claim 66 wherein R^{24} and R^{25} are -CH₃.

Claim 68. (new): The method of claim 67 wherein a double bond is present at the 1-2 and 5-6 positions and R^{24} and R^{25} are both -CH₃.

15

Claim 69. (new): The method of claim 67 wherein a double bond is present at the 5-6 position and R^{24} and R^{25} are both -CH₃.

RESPONSE TO THE NOTICE

A complete listing of claims is included with this paper. The Office sent notice that Applicant's prior amendment was non-compliant because the listing of claims did not contain the text of withdrawn claims. The text of withdrawn claims 33-39 are included with this listing. Applicant's amendment should now be compliant.

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Date: Sept 23, 2004

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